ENVIRONMENTAL PLUS, INC.
CONSULTING AND REMEDIAL CONSTRUCTION

9 November 2011

Mr. Geoffrey Leking
Environmental Engineer
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

RE: Remediation Closure Report
ConocoPhillips Company – EVGSAU Well #2801-002 Release Area
UL-M (SW1/4 of the SW1/4) of Section 28, T 17 S, R 35 E; Lea County, New Mexico
Latitude: 32° 46' 49.99"; Longitude: 103° 28' 11.64"
EPI Ref. #150034

Dear Mr. Leking:

The below *Remediation Closure Report* (*Report*) is an abbreviated version depicting prominent remedial activities conducted on the above referenced Release Area. However, for clarity and cross reference elimination purposes, the *Report* includes *Release History, Site Background, Preliminary Field Work, Analytical Data and Procedures* and *Field Remediation Activities*.

Release History

On 3 August 2011 at 0700 a.m. approximately 0.4-barrels (bbls) of produced water and 15-bbls of petroleum products were released from a 2-3/8 inch steel surface flow line. Approximately 0.4-bbl of produced water and 15-bbls of petroleum product were recovered. The combined fluids covered a release area of ±1,232- square feet and an overspray area of ±2,956- square feet. After initial vacuuming of fluids, ConocoPhillips retained the services of Environmental Plus, Inc., (EPI) to GPS survey, photograph and assess product/water impacts of the release area. This letter report provides a *Remediation Proposa*l for the release area.

Site Background

The release area is located in Section 28, T17S, R35E at an approximate elevation of 3,951 feet above mean sea level (amsl). The property is owned by the State of New Mexico and managed by the New Mexico State Land Office (NMSLO). A search for water wells was completed utilizing the New Mexico Office of the State Engineers website and a database maintained by the United States Geological Survey (USGS). No water wells (domestic, agriculture or public) or bodies of surface water exist within a 1,000 feet radius of the release area (reference *Figure 2*). Groundwater data indicates the average water depth is approximately sixty-five (65) feet below ground surface (bgs). Based on available information, it was determined the vertical distance between impacted soil and groundwater is approximately 60 feet. Utilizing this information, New Mexico Oil Conservation Division Remedial Threshold Goals (NMOCD Goals) for this Site were determined as following:

2100 AVE O ~ PO BOX 1558 ~ EUNICE, NM 88231
PHONE (575) 394-3481 * (575) 394-2601 FAX

ENVIRONMENTAL PLUS, INC.

pKJ1603452866

IRP-4138

Parameter	NMOCD Goals
Benzene	10 mg/Kg
BTEX	50 mg/Kg
TPH	100 mg/Kg
Chlorides	250 mg/Kg

Preliminary Field Work

On 17 August 2011 EPI visited the Release Area to conduct GPS survey, photograph and assess surface damage. Having recently completed remediation activities in the Buckeye area [ConocoPhillips, EVGSAU #2913-006 Release Area located in UL-P (SE1/4 of the SE1/4) of Section 19, T17S, R37E], EPI concluded delineation via trenching or soil borings was not required. Dense rock formations which commence approximately four (4) inches and extend fifteen (15) feet below ground surface (bgs) limit vertical migration of production fluids. Based on related experience, impacted area should be limited to less than five (5) vertical feet. This concept is promoted by efficiency of cleanup efforts in vacuuming the release area leaving little volume of production fluids for sub-surface seepage.

Analytical Data and Procdures

In reviewing Table 3, *Summary of Excavation Soil Sample Field Analyses and Laboratory Analytical Results,* it can be noted chloride concentrations are the main Constituent-of-Concern with TPH concentrations a minor part. Sidewalls and bottom of the excavation were excavated until both TPH and chloride concentrations were within NMOCD Remedial Threshold Goals (NMOCD Goals).

Upon collection of soil samples, a portion of each was field tested for organic vapor and chloride concentrations. Soil samples collected for organic vapors were placed in self-sealing polyethylene bags and allowed to equilibrate to ~70° F. The soil sample was then tested for organic vapors utilizing a MiniRae™ Photoionizaztion Detector (PID) equipped with a 10.6 electron-volt (eV) lamp calibrated for benzene response. Chloride concentrations were analyzed in the field utilizing a LaMotte Chloride Kit (Titration Method).

Soil samples designated for laboratory analyses were immediately inserted into laboratory provided containers, labeled, placed in self-sealing polyethylene bags, inserted into coolers, iced down and transported to an independent laboratory for analyses of Constituent-of-Concern under Chain-of-Custody protocol.

Field Remedial Activities

EPI mobilized equipment to the job site on 10 October 2011 and commenced excavation on 12 October 2011. From 12-23 October 2011, approximately 532 cubic yards of impacted material were excavated from the release and overspray areas. Soil samples were collected from sidewalls and bottom of the excavation on 10-14-11, 10-18-11 and 10-19-11 for laboratory analyses of BTEX, TPH and chloride concentrations. Figure #4, *Sample Point Location Map*, illustrates sidewall (SW) and bottom hole (BH) soil sample locations with values noted in Table #3.

With all soil samples indicating BTEX, TPH and chloride concentrations were within NMOCD Goals, backfilling the excavation commenced. On 24 October 2011, approximately 490 cubic yards of clean top soil free of deleterious material, large clumps or rocks were transported to the release area from Pearce Estate Pit. Imported top soil combined with 42 cubic yards of previously stockpiled material on site was used to backfill the excavation and release areas. Due to release area overspray being chloride concentrations and surficial in nature, top one (1) foot was excavated and back filled with top soil. Area did not require spraying with six (6) percent Micro®Blaze solution.

Upon completion of backfill activities, the area was contoured to prevent wind/water erosion, pooling of water and promote natural drainage. Remaining activity for completing the project is discing and deep drill seeding of the disturbed areas with a mixture approved by the NMSLO. However, in view of drought conditions, it is recommended this activity be postponed until ground and weather conditions are conducive to vegetative growth. Hence, this event may not occur until late spring 2012.

Should you have technical questions, concerns or need additional information, please contact me at (575) 394-3481 (office), (575) 441-7802 (cellular) or vie e-mail at dduncanepi@gmail.com.

Official communications should be directed to Mr. John Gates at (575) 391-3158 (office), (575) 390-4821 (cellular) or via e-mail at John.W.Gates@conocophillips.com. Correspondence should be addressed to:

Mr. John W. Gates
HSER Lead
Permian-Buckeye Operations
29 Vacuum Complex Lane
Lovington, New Mexico 88260-9664

Sincerely,

ENVIRONMENTAL PLUS, INC.,

David P. Duncan
Civil Engineer
EPI Project Manager

Cc: John W. Gates, HSER Lead – ConocoPhillips Corp.
Myra Harrison, District Resource Manager – NMSLO (Hobbs, NM)
Steve Ikeda, Field Operations – NMSLO (Santa Fe, NM)
Cody Miller, General Manager - EPI
Roger Boone, Operations Superintendent – EPI

Encl: Figure 1 – Area Map
Figure 2 – Site Location Map
Figure 3 – Release Area Map

Figure 4 – Sample Point Location Map
Table 1 – Well Data
Table 3 – Summary of Soil Sample Field Analyses and Laboratory Analytical Results
Attachment I – Photographs
Attachment II – Laboratory Analytical Results
Attachment III – Copy of Initial NMOCD Form C-141
Final NMOCD Form C-141

FIGURES

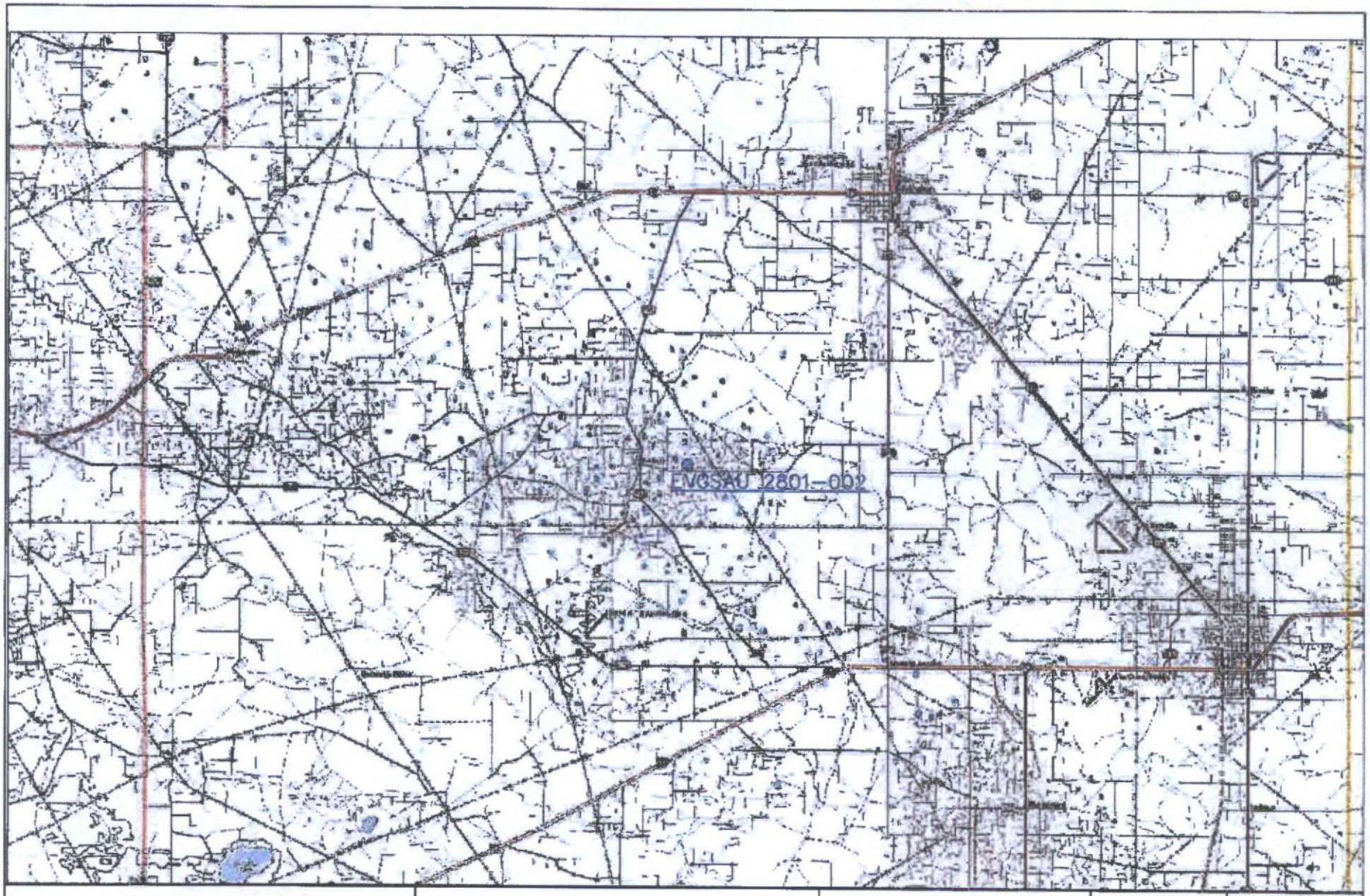

Figure 1
Site Location Map
ConocoPhillips
EVGSAU 2801-002

Lea County, New Mexico
SW 1/4 of the SW 1/4, Sec. 28, T17S, R35E
N 32° 46' 49.9" W 103° 28' 11.64"
Elevation: 3,951 feet amsl

DWG By: Daniel Dominguez
March 2006

REVISED:
9/21/2011

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Feet

SHEET
1 of 1

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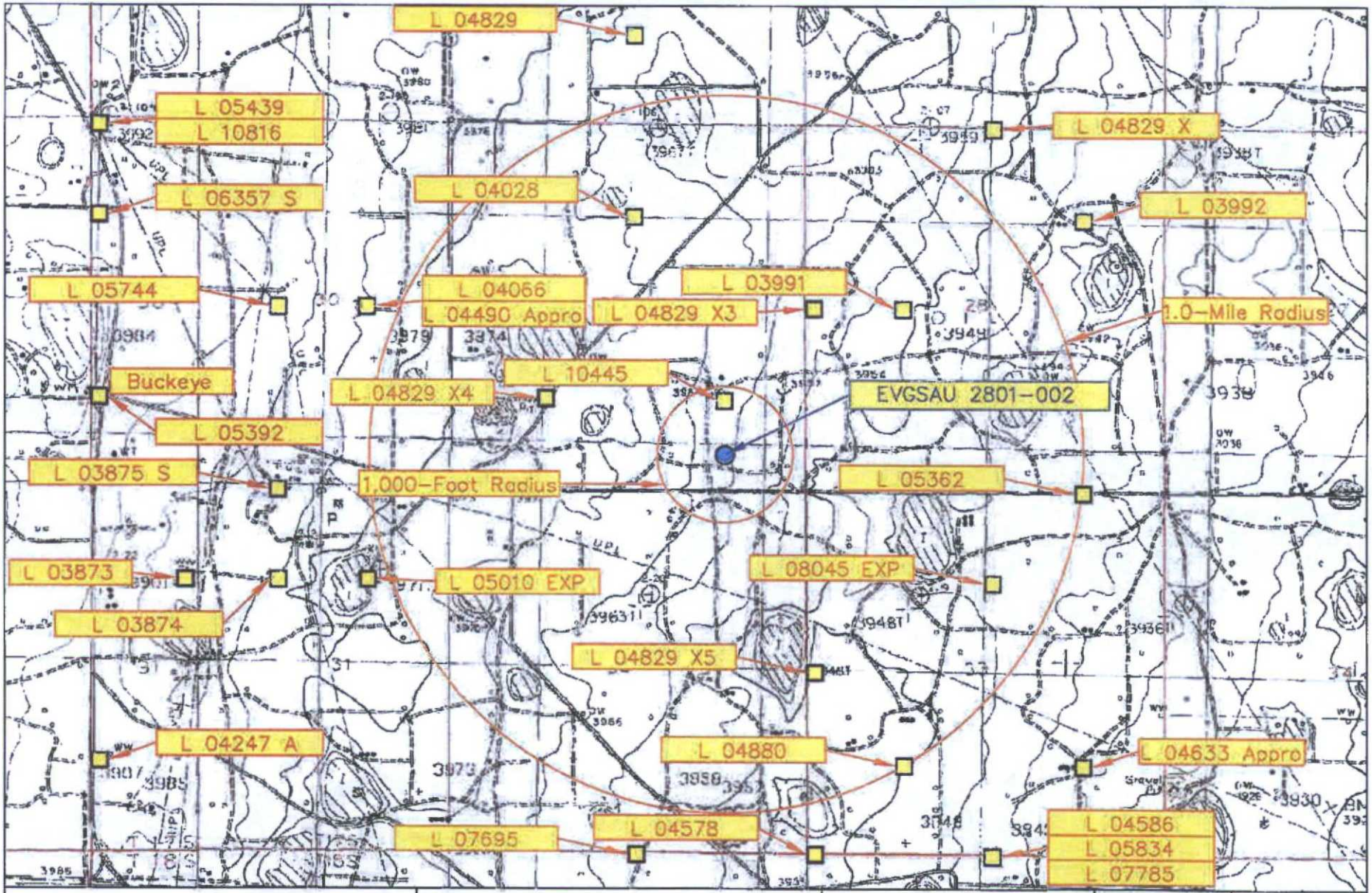


Figure 2 Site Location Map ConocoPhillips EVGSAU 2801-002	Lea County, New Mexico SW 1/4 of the SW 1/4, Sec. 28, T17S, R35E N 32° 46' 49.9" W 103° 28' 11.64" Elevation: 3,951 feet amsl	DWG By: Daniel Dominguez March 2006	REVISED: 9/21/2011
			SHEET 1 of 1

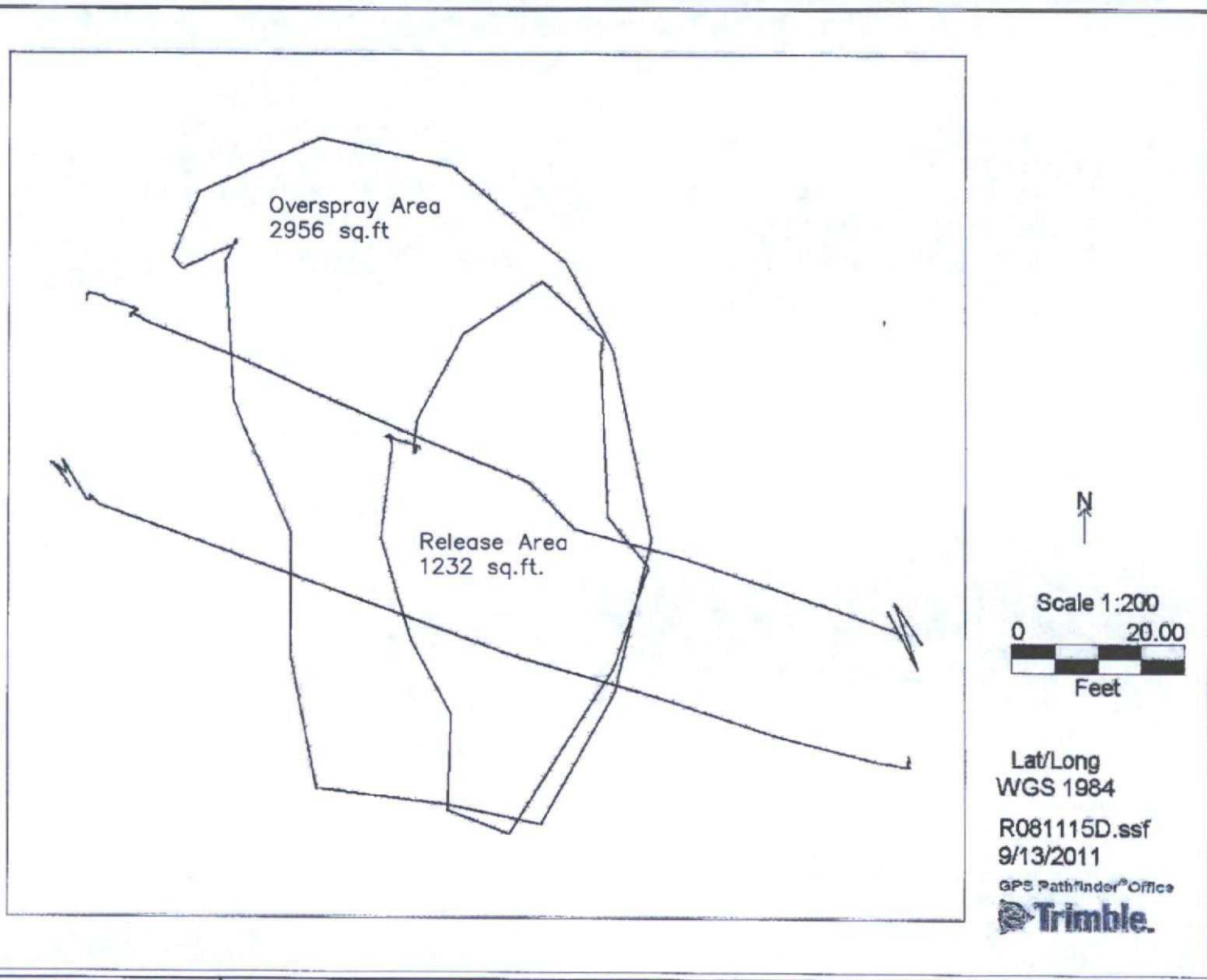


Figure 3 GPS Release Area ConocoPhillips EVGSAU 28001–002	Lea County, New Mexico SW 1/4 SW 1/4 Sec. 28–17S–35E	DWG By: Jerry Smith Sept. 2011	REVISED:	N
		0 75 150	SHEET 1 of 1	

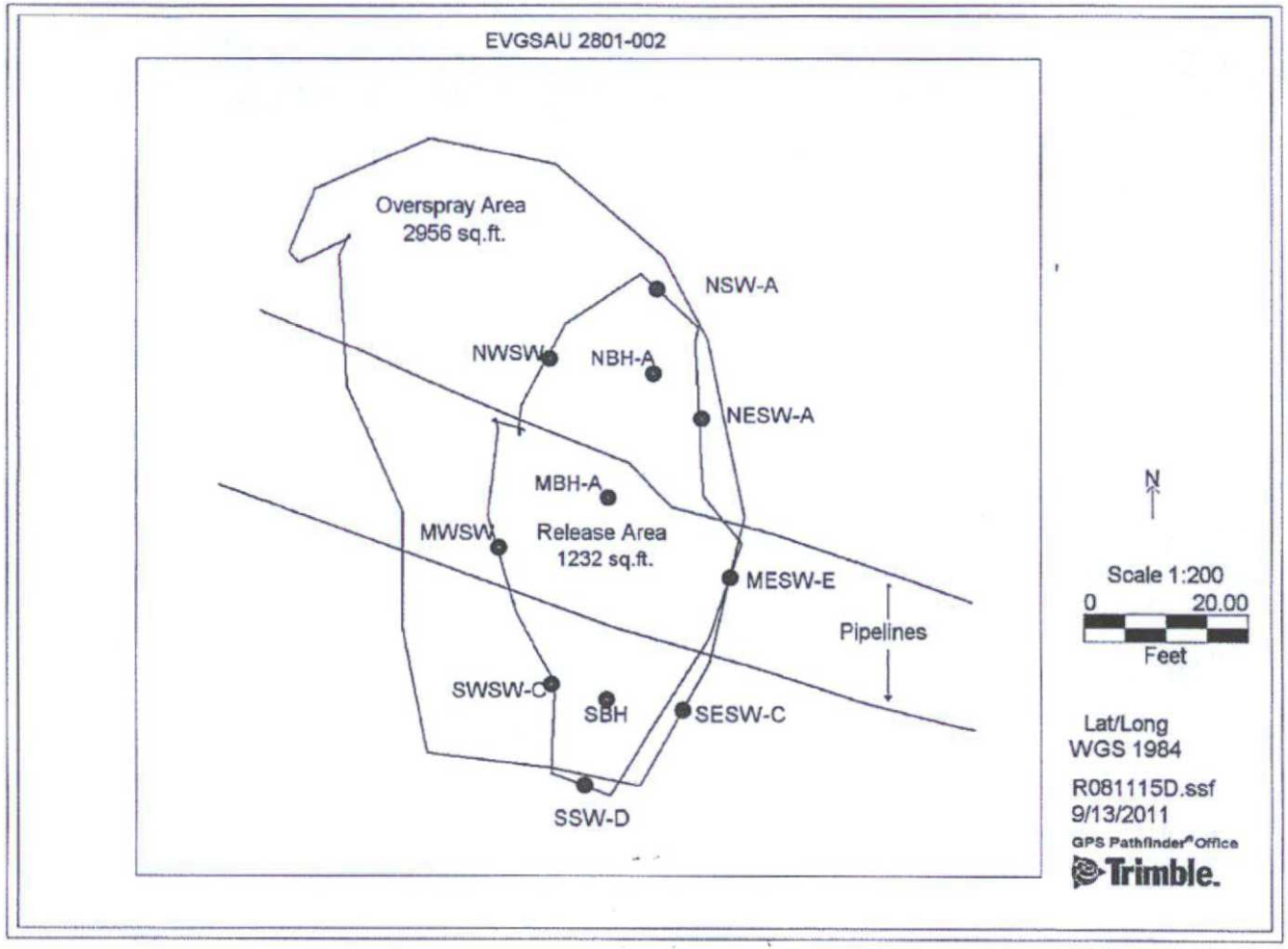


Figure 4 Soil Sample Location Map ConocoPhillips EVGSAU 2801–002	Lea County, New Mexico SW 1/4 SW 1/4 Section 28–17S–35E	DWG By: Jerry Smith November 2011	REVISED:	N
			SHEET 1 of 1	

TABLES

TABLE 1

Well Data

ConocoPhillips - East Vacuum Graybr g - San Andres Unit Tract 2801-002 (Ref. # 150034)

Well Numbr	Diversion[A]	Owner	Use	Twsp	Rng	Sec qqq	Latitude	Longitude	Date Measured	Surface Elevation[B]	Depth to Water (ft bgs)
L 04028	3	ZAPATA PETROLEUM CORPORATION	PRO	17S	35E	29 2 1	N32° 48' 34.50"	W103° 28' 45.96"		3,973	
L 04829 X4				17S	35E	29 3 2	N32° 48' 8.33"	W103° 29' 1.36"		3,976	
L 10445	0	GILES LEE	STK	17S	35E	29 4 2 4	N32° 48' 8.14"	W103° 28' 30.39"		3,967	
L 05439	0	HUMBLE OIL & REFINING COMPANY	PRO	17S	35E	19 3 3 2	N32° 48' 47.66"	W103° 30' 18.14"	25-Jul-64	3,996	85
L 10816	0	PEARCE RANCH	STK	17S	35E	19	N32° 48' 47.66"	W103° 30' 18.14"		3,996	
L 04829	317	PHILLIPS PETROLEUM COMPANY	OIL	17S	35E	20 4 1	N32° 49' 0.71"	W103° 28' 46.03"		3,973	
L 04829 X				17S	35E	21 4 3	N32° 48' 47.21"	W103° 27' 44.00"		3,957	
L 03991	0	ZAPATA PETROLEUM CO.	PRO	17S	35E	28 1 4 4	N32° 48' 21.08"	W103° 27' 59.45"		3,957	
L 03992	3	ZAPATA PETROLEUM CORPORATION	PRO	17S	35E	28 2 2 3	N32° 48' 34.02"	W103° 27' 28.47"	02-Sep-58	3,947	65
L 04829 X3				17S	35E	28 1 3	N32° 48' 21.16"	W103° 28' 14.95"		3,963	
L 05362	0	HUMBLE OIL & REFINING COMPANY	PRO	17S	35E	28 4 4 3	N32° 47' 54.70"	W103° 27' 28.42"	02-Apr-64	3,947	80
L 03875 S	0	DUKE ENERGY FIELD SERVICES, LP	POL	17S	35E	30 4 3 3	N32° 47' 55.30"	W103° 29' 47.88"		3,986	
L 04066	3	GACKLE DRILLING COMPANY	PRO	17S	35E	30 2 4	N32° 48' 21.55"	W103° 29' 32.41"	03-Feb-59	3,986	70
L 04490 APPRO	0	MORAN OIL PRODUCING & DRILLING	PRO	17S	35E	30 2 4	N32° 48' 21.55"	W103° 29' 32.41"	25-Jul-60	3,986	70
L 05392	0	INC. A.W. THOMPSON	PRO	17S	35E	30 3 1	N32° 48' 8.38"	W103° 30' 18.09"	16-May-64	3,996	80
L 05744	0	TRI-SERVICE DRILLING COMPANY	PRO	17S	35E	30 2 3 3	N32° 48' 21.53"	W103° 29' 47.94"		3,993	75
L 06357 S	207.8	REPUBLIC FACTORS INC. OF MIDLA	COM	17S	35E	30 1 1 3	N32° 48' 34.57"	W103° 30' 18.13"	20-Jun-89	3,996	130
L 03873	31.68	PHILLIPS PETROLEUM CO.	IND	17S	35E	31 1 2 3	N32° 47' 42.18"	W103° 30' 3.44"		3,986	
L 03874	23.67	PHILLIPS PETROLEUM CORP.	IND	17S	35E	31 2 1 3	N32° 47' 42.18"	W103° 29' 47.86"		3,983	
L 04247 A	1400	U.S. BANK NATIONAL ASSOCIATION	IND	17S	35E	31 3 1 3	N32° 47' 16.01"	W103° 30' 18.04"	25-Jan-74	3,993	95
L 05010 EXP	0	NOBLE DRILLING CO.	PRO	17S	35E	31 2 2	N32° 47' 42.15"	W103° 29' 32.29"		3,976	
L 07695	480	PHILLIPS PETROLEUM COMPANY	OIL	17S	35E	32 4 3	N32° 47' 2.60"	W103° 28' 45.63"		3,963	
L 04578	3	SHOENFELD-HUNTER-KITCH DRLG.CO	PRO	17S	35E	33	N32° 47' 2.45"	W103° 28' 14.75"	12-Jan-61	3,957	60
L 04586	3	HONDO DRILLING	PRO	17S	35E	33 4 3 3	N32° 47' 2.29"	W103° 27' 43.86"	18-Jan-61	3,947	50
L 04633 APPRO	0	HONDO DRILLING COMPANY	PRO	17S	35E	33 4 2	N32° 47' 15.34"	W103° 27' 28.42"	20-Apr-61	3,940	65
L 04829 X5				17S	35E	33 1 3	N32° 47' 28.77"	W103° 28' 14.73"		3,957	
L 04880	0	HONDO DRILLING CO.	PRO	17S	35E	33 3 2	N32° 47' 15.52"	W103° 27' 59.30"	18-Apr-62	3,953	90
L 05834	1150	SOUTHWESTERN PUBLIC SERVICE	IND	17S	35E	33 4	N32° 47' 2.29"	W103° 27' 43.86"		3,947	
L 07785	0	SOUTHWESTERN PUBLIC SERVICE CO	IND	17S	35E	33 4 3	N32° 47' 2.29"	W103° 27' 43.86"		3,947	
L 08045 EXP	0	PHILLIPS PETROLEUM COMPANY	SAN	17S	35E	33 2 1 4	N32° 47' 41.68"	W103° 27' 43.89"		3,947	
L 05850	0	KERMAC POTASH CO.	PRO	17S	35E	19 2 2 2	N32° 49' 27.04"	W103° 29' 32.54"	10-Feb-66	3,983	
L 02943	3	% CITIES SERVICE CO.	PRO	17S	35E	20 1 1 4	N32° 49' 27.05"	W103° 29' 17.03"	27-Jul-55	3,987	60
L 10443	0	GILES LEE	STK	17S	35E	20 1 3 3	N32° 49' 14.00"	W103° 29' 17.01"		3,983	
L 09097 (2) EXP	0	PHILLIPS PETROLEUM COMPANY	PRO	17S	35E	21 1 4 2	N32° 49' 13.45"	W103° 27' 59.60"		3,967	

[B] = Elevation interpolated from USGS topographical map based on referenced location.
PRO = 72-12-1 Prospecting or development of natural resource
IND = Industrial
OIL = Oil production
SAN = 72-12-1 Sanitary in conjunction with commercial use
COM = Commercial
STK = 72-12-1 Livestock watering
quarters are 1=NW, 2=NE, 3=SW, 4=SE; quarters are biggest to smallest
Shaded area indicates wells not shown in Figure 2

TABLE 3

Summary of Excavation Soil Sample Field Analyses and Labratory Analytical Results

ConocoPhillips Company

EVGSAU #22801-002 (UL-M, Section 28, T17S, R35E, Lea County, New Mexico)

NMOCD #; EPI Ref. #150034

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C12) (mg/Kg)	TPH (C12-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
SBH	2	In Situ	13-Oct-11	30.4	280	--	--	--	--	--	ND	ND	ND	ND	208
SWSW	1	Evcavated	13-Oct-11	36.5	3,200										
SWSW-A	1	Excavated	14-Oct-11	32.8	880										
SWSW-B	1	Excavated	14-Oct-11	39.3	720										
SWSW-C	1	In Situ	18-Oct-11	31.2	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	28.8
SESW	1	Excavated	13-Oct-11	40.3	1,440										
SESW-A	1	Excavated	14-Oct-11	36.4	1,120										
SESW-B	1	Excavated	14-Oct-11	37.9	880										
SESW-C	1	In Situ	18-Oct-11	26.0	240	--	--	--	--	--	ND	ND	ND	ND	15.4
MBH	2	Excavated	13-Dec-11	74.6	--										
MBH-A	2.5	In Situ	13-Oct-11	30.1	160	--	--	--	--	--	ND	ND	ND	ND	ND
MESW	1	Excavated	13-Oct-11	37.7	280										
MESW-A	1	Excavated	14-Oct-11	683.0	--										
MESW-B	1	Excavated	14-Oct-11	40.0	400										
MESW-C	1	Excavated	18-Oct-11	39.2	600										
MESW-D	1	Excavated	19-Oct-11	--	520										

TABLE 3

Summary of Excavation Soil Sample Field Analyses and Laboratory Analytical Results

ConocoPhillips Company

EVGSAU #22801-002 (UL-M, Section 28, T17S, R35E, Lea County, New Mexico)

NMOCD #; EPI Ref. #150034

Sample I.D.	Depth (feet)	Soil Status	Sample Date	PID Field Analysis (ppm)	Field Chloride Analyses (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH (C6-C12) (mg/Kg)	TPH (C12-C28) (mg/Kg)	TPH (C28-C35) (mg/Kg)	Total TPH (C6-C35) (mg/Kg)	Chloride (mg/Kg)
MESW-E	1	In Situ	19-Oct-11	--	320	--	--	--	--	--	<10.0	<10.0	--	<20.0	128
MWSW	1	In Situ	13-Oct-11	30.1	160	--	--	--	--	--	ND	ND	ND	ND	168
SSW	1	Excavated	14-Oct-11	27.8	2,040										
SSW-A	1	Excavated	14-Oct-11	40.8	2,080										
SSW-B	1	Excavated	18-Oct-11	21.7	400										
SSW-C	1	Excavated	19-Oct-11	--	400										
SSW-D	1	In Situ	19-Oct-11	--	280	--	--	--	--	--	<10.0	<10.0	--	<20.0	64.0
NSW	1	Excavated	14-Oct-11	930	--										
NSW-A	1	In Situ	18-Oct-11	29	360	--	--	--	--	--	ND	ND	ND	ND	121
NESW	1	Excavated	14-Oct-11	55.0	--										
NESW-A	1	In Situ	18-Oct-11	31.7	320	ND	ND	ND	ND	ND	ND	ND	ND	ND	53.8
NWSW	1	1	14-Oct-11	42.9	240	--	--	--	--	--	ND	ND	ND	ND	164
NBH	2	Excavated	14-Oct-11	84.4	--										
NBH-A	2.5	In Situ	18-Oct-11	27.9	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.93
NMOCD Remedial Threshold Goals				100		10				50				100	250

Bold values are in excess of NMOCD Remediation Threshold Goals

Nomenclature: BH = Bottom Hole; SW- Sidewall (N = North, S = South, E = East and W = West)

J = Detected, but below Reporting Limits. Therefore, result ia an estimated concentration (CLP J-Flag)

-- = Not Analyzed; ND - Not Detected; SB- Soil Boring; BG - Background Soil Borin

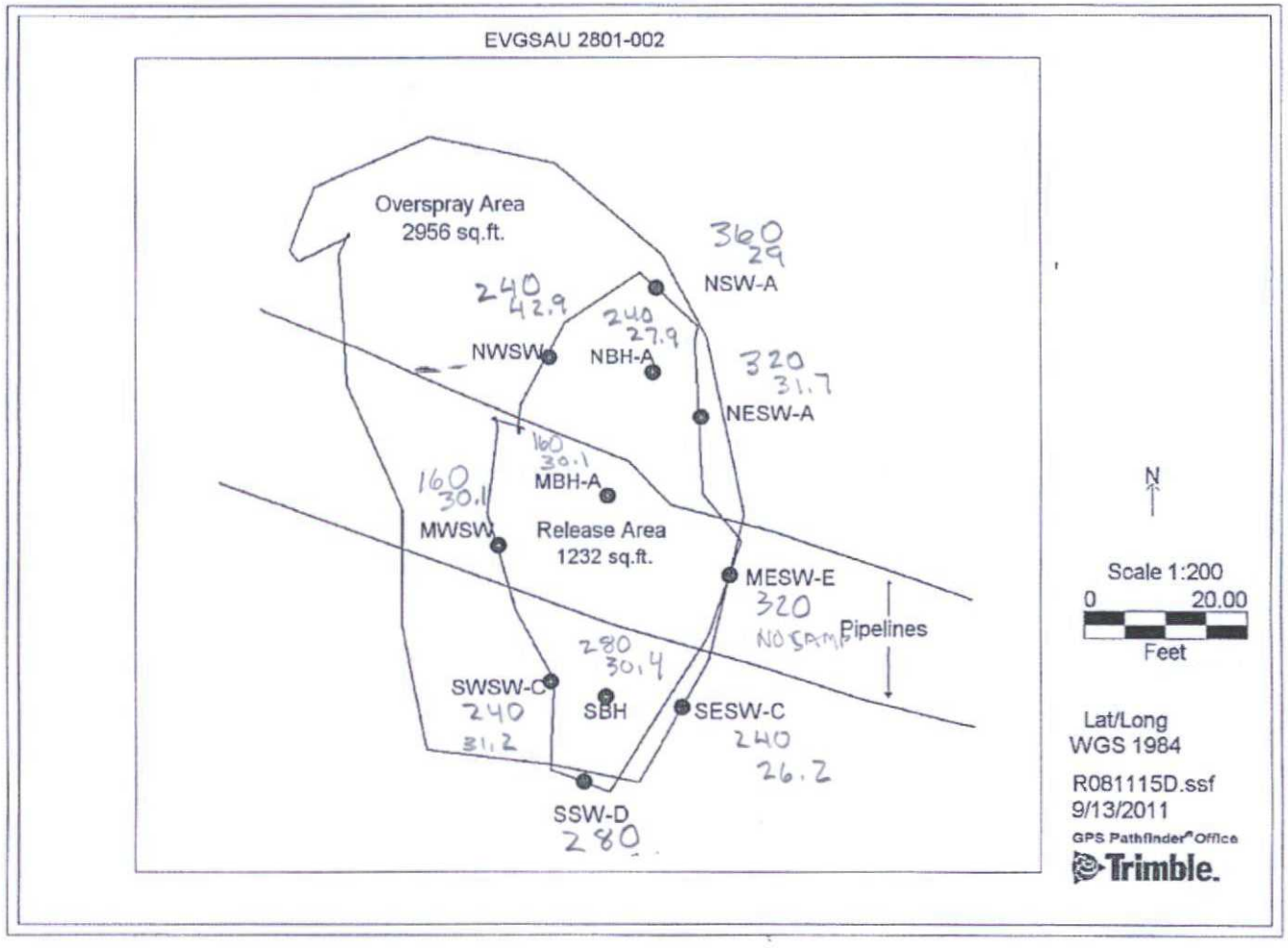
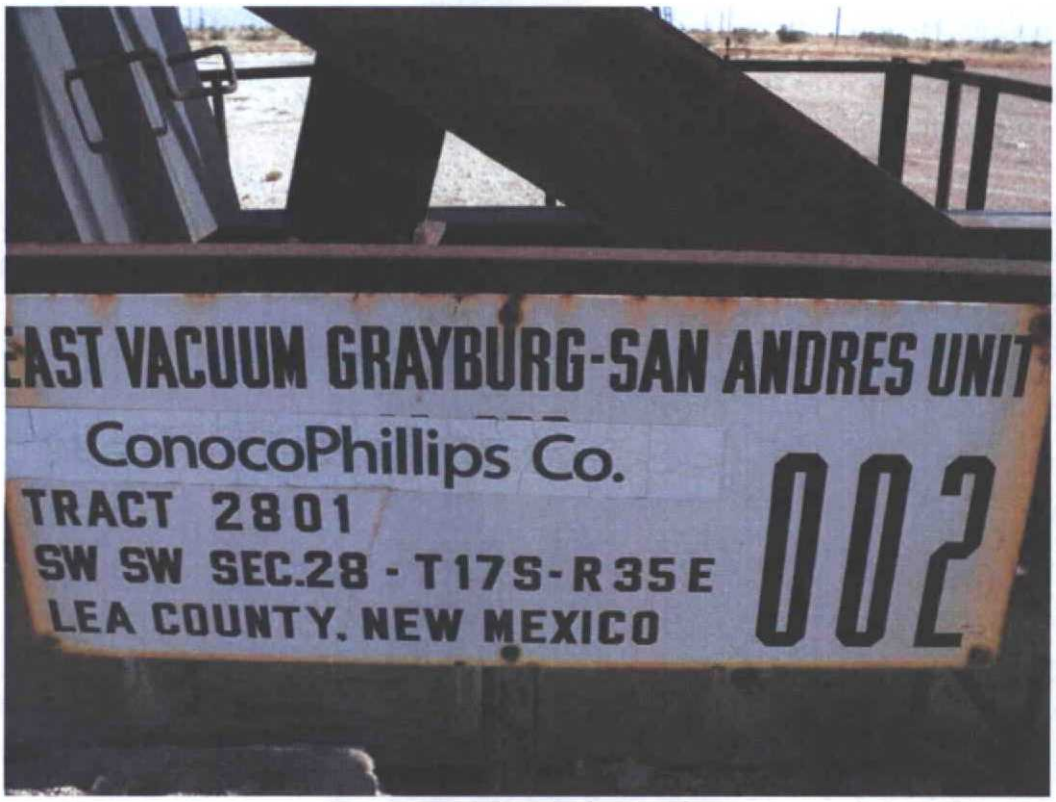


Figure 4 Soil Sample Location Map ConocoPhillips EVGSAU 2801–002	Lea County, New Mexico SW 1/4 SW 1/4 Section 28–17S–35E	DWG By: Jerry Smith November 2011	REVISED:	N
			SHEET 1 of 1	

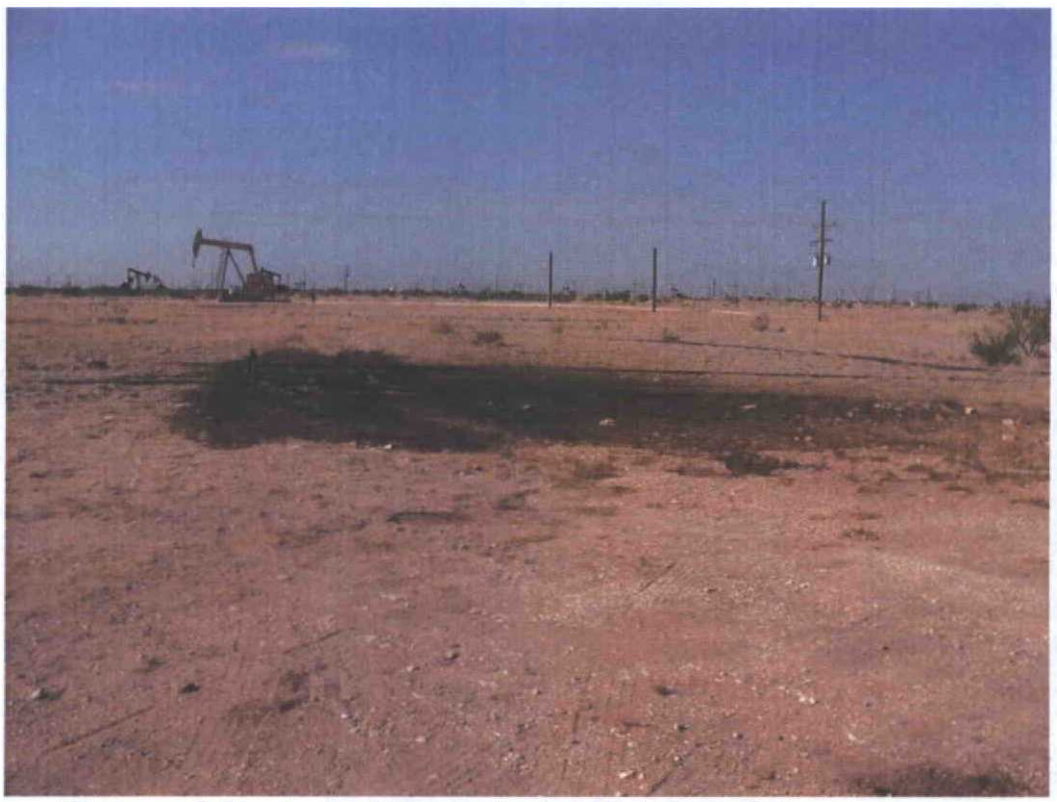
ATTACHMENTS

ATTACHMENT I

Photographs



Photograph No. 1 - Lease Sign



Photograph No. 2 – Looking northerly at Release and Overspray Areas

Photograph No. 3 – Looking northwesterly at Release Area and surface flow line

Photograph No. 4 – Looking northerly at excavation, surface flow lines and pipe supports

Photograph No. 5 – Looking northerly at excavation, side walls, surface flow lines and pipe supports

Photograph No. 6 – Looking northerly at backfilled Excavation and Overspray Areas

ATTACHMENT II

Laboratory Analytical Results

Analytical Report 429638

for

Environmental Plus, Incorporated

Project Manager: David P. Duncan

EVGSAU 2801-002

150034

18-OCT-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

18-OCT-11

Project Manager: **David P. Duncan**
Environmental Plus, Incorporated
P.O. Box 1558
Eunice, NM 88231

Reference: XENCO Report No: **429638**
EVGSAU 2801-002
Project Address: UL-M, Sec. 28, T17S, R35E

David P. Duncan:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 429638. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 429638 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 429638

Environmental Plus, Incorporated, Eunice, NM

EVGSAU 2801-002

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SBH	S	10-13-11 11:50		429638-001
MWSW	S	10-13-11 12:40		429638-002
MBH-A	S	10-13-11 13:25		429638-003

CASE NARRATIVE

XENCO Laboratories

Client Name: Environmental Plus, Incorporated
Project Name: EVGSAU 2801-002

Project ID:	*150034*	*Report Date:*	*18-OCT-11*
Work Order Number:	*429638*	*Date Received:*	*10/14/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Certificate of Analysis Summary 429638

Environmental Plus, Incorporated, Eunice, NM

Project Name: EVGSAU 2801-002

Project Id: 150034
Contact: David P. Duncan
Project Location: UL-M, Sec. 28, T17S, R35E

Date Received in Lab: Fri Oct-14-11 03:58 pm
Report Date: 18-OCT-11
Project Manager: Brent Barron II

Analysis Requested											
	Lab Id:	429638-001		429638-002		429638-003					
	Field Id:	SBH		MWSW		MBH-A					
	Depth:										
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Oct-13-11 11:50		Oct-13-11 12:40		Oct-13-11 13:25					
Anions by E300	*Extracted:*										
	Analyzed:	Oct-17-11 18:01		Oct-17-11 18:01		Oct-17-11 18:01					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		208	4.47	168	4.68	ND	4.70				
Percent Moisture	*Extracted:*										
	Analyzed:	Oct-17-11 14:52		Oct-17-11 14:52		Oct-17-11 14:52					
	Units/RL:	%	RL	%	RL	%	RL				
Percent Moisture		6.03	1.00	10.3	1.00	10.6	1.00				
TPH By SW8015 Mod	*Extracted:*	Oct-17-11 16:30		Oct-17-11 16:30		Oct-17-11 16:30					
	Analyzed:	Oct-17-11 19:10		Oct-17-11 19:34		Oct-17-11 19:59					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
C6-C12 Gasoline Range Hydrocarbons		ND	15.9	ND	16.7	ND	16.8				
C12-C28 Diesel Range Hydrocarbons		ND	15.9	ND	16.7	ND	16.8				
C28-C35 Oil Range Hydrocarbons		ND	15.9	ND	16.7	ND	16.8				
Total TPH		ND	15.9	ND	16.7	ND	16.8				

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: EVGSAU 2801-002

Work Orders : 429638, **Project ID:** 150034

Lab Batch #: 872537 **Sample:** 429638-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/11 19:10

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	72.4	99.8	73	70-135	
o-Terphenyl	43.5	49.9	87	70-135	

Lab Batch #: 872537 **Sample:** 429638-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/11 19:34

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.5	100	78	70-135	
o-Terphenyl	47.2	50.1	94	70-135	

Lab Batch #: 872537 **Sample:** 429638-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/17/11 19:59

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	86.3	99.9	86	70-135	
o-Terphenyl	50.9	50.0	102	70-135	

Lab Batch #: 872537 **Sample:** 612804-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/17/11 18:46

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	74.8	100	75	70-135	
o-Terphenyl	51.0	50.2	102	70-135	

Lab Batch #: 872537 **Sample:** 612804-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/17/11 17:56

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	82.6	100	83	70-135	
o-Terphenyl	41.3	50.0	83	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Final 1.000

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: EVGSAU 2801-002

Work Orders : 429638,

Project ID: 150034

Lab Batch #: 872537 **Sample:** 612804-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/17/11 18:21

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	75.9	100	76	70-135	
o-Terphenyl	41.1	50.2	82	70-135	

Lab Batch #: 872537 **Sample:** 429638-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/18/11 02:13

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	106	100	106	70-135	
o-Terphenyl	55.9	50.1	112	70-135	

Lab Batch #: 872537 **Sample:** 429638-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/18/11 02:37

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	94.2	99.6	95	70-135	
o-Terphenyl	50.3	49.8	101	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

BS / BSD Recoveries

Project Name: EVGSAU 2801-002

Work Order #: 429638 **Project ID:** 150034

Analyst: BRB **Date Prepared:** 10/17/2011 **Date Analyzed:** 10/17/2011

Lab Batch ID: 872546 **Sample:** 872546-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.840	20.0	21.7	109	20.0	22.2	111	2	75-125	20	

Analyst: BBH **Date Prepared:** 10/17/2011 **Date Analyzed:** 10/17/2011

Lab Batch ID: 872537 **Sample:** 612804-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

TPH By SW8015 Mod Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	733	73	1000	729	73	1	70-135	35	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	864	86	1000	835	84	3	70-135	35	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: EVGSAU 2801-002

Work Order #: 429638
Lab Batch #: 872546
Project ID: 150034
Date Analyzed: 10/17/2011
Date Prepared: 10/17/2011
Analyst: BRB
QC- Sample ID: 429589-006 S
Batch #: 1
Matrix: Solid
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	64.0	200	278	107	75-125	

Lab Batch #: 872546
Date Analyzed: 10/17/2011
Date Prepared: 10/17/2011
Analyst: BRB
QC- Sample ID: 429638-001 S
Batch #: 1
Matrix: Soil
Reporting Units: mg/kg

Inorganic Anions by EPA 300	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	%R [D]	Control Limits %R	Flag
Chloride	208	106	322	108	75-125	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

Final 1.000

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: EVGSAU 2801-002

Work Order # : 429638 **Project ID:** 150034

Lab Batch ID: 872537 **QC- Sample ID:** 429638-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/18/2011 **Date Prepared:** 10/17/2011 **Analyst:** BBH

Reporting Units: mg/kg

	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
TPH By SW8015 Mod **Analytes**	**Parent Sample Result [A]**	**Spike Added [B]**	**Spiked Sample Result [C]**	**Spiked Sample %R [D]**	**Spike Added [E]**	**Duplicate Spiked Sample Result [F]**	**Spiked Dup. %R [G]**	**RPD %**	**Control Limits %R**	**Control Limits %RPD**	**Flag**
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	897	90	996	831	83	8	70-135	35	
C12-C28 Diesel Range Hydrocarbons	15.8	1000	1100	108	996	1000	99	10	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories

Sample Duplicate Recovery

Project Name: EVGSAU 2801-002

Work Order #: 429638

Lab Batch #: 872546 **Project ID:** 150034

Date Analyzed: 10/17/2011 18:01 **Date Prepared:** 10/17/2011 **Analyst:** BRB

QC- Sample ID: 429638-001 D **Batch #:** 1 **Matrix:** Soil

Reporting Units: mg/kg

Anions by E300 Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	208	208	0	20	

Lab Batch #: 872551

Date Analyzed: 10/17/2011 14:52 **Date Prepared:** 10/17/2011 **Analyst:** WRU

QC- Sample ID: 429584-011 D **Batch #:** 1 **Matrix:** Solid

Reporting Units: %

Percent Moisture Analyte	SAMPLE / SAMPLE DUPLICATE RECOVERY				
	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	5.72	5.96	4	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

BRL - Below Reporting Limit

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231 P.O. Box 1558, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

Chain of Custody Form

LAB: Xenco

Company Name	Environmental Plus, Inc.
EPI Project Manager	David P. Duncan
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	ConocoPhillips Company
Facility Name	EVGSAU 2801-002
Location	UL-M, Sec. 28, T17S, R35E
Project Reference	150034
EPI Sampler Name	Danny Deaton

Remit Invoice To:

ConocoPhillips

ATTN: Mr. John Gates
HSER Lead
ConocoPhillips Company
29 Vacuum Complex Lane
Lovington, New Mexico 88260-9664

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH
429638																						
1	SBH	G	1			X					X		13-Oct-11	11:50		X	X					
2	MWSW	G	1			X					X		13-Oct-11	12:40		X	X					
3	MBH-A	G	1			X					X		13-Oct-11	13:25		X	X					
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Sampler Relinquished: Danny Deaton — 10/14/2011 Time 9:30 — Received By: [signature]

Relinquished by: [signature] — 10/14/2011 Time 5:58 — Received By: (lab staff) [signature]

Delivered by: — Sample Cool & Intact: 5.5 (Yes) No — Checked By:

E-mail results to: dduncanepl@gmail.com & John.W.Gates@conocophillips.com

RUSH ORDER REQUESTED 48hr TAT

4oz glass w/labels no seals

XENCO Laboratories

XENCO Laboratories	Document Title: Sample Receipt Checklist
Atlanta, Boca Raton, Corpus Christi, Dallas	Document No.: SYS-SRC
Houston, Miami, Odessa, Philadelphia	Revision/Date: No. 01, 5/27/2010
Phoenix, San Antonio, Tampa	Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: EP1

Date/Time: 10.14.11 15:58

Lab ID #: 429638

Initials: AE

Sample Receipt Checklist

1. Samples on ice?	Blue	(Water)	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	(N/A)	
4. Chain of Custody present?	(Yes)	No		
5. Sample instructions complete on chain of custody?	(Yes)	No		
6. Any missing / extra samples?	Yes	(No)		
7. Chain of custody signed when relinquished / received?	(Yes)	No		
8. Chain of custody agrees with sample label(s)?	(Yes)	No		
9. Container labels legible and intact?	(Yes)	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No		
11. Samples in proper container / bottle?	(Yes)	No		
12. Samples properly preserved?	(Yes)	No	N/A	
13. Sample container intact?	(Yes)	No		
14. Sufficient sample amount for indicated test(s)?	(Yes)	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	Yes	No	(N/A)	
17. VOC sample have zero head space?	(Yes)	No	N/A	

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	5.5 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

Contact: _____ Contacted by: _____ Date/Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

Analytical Report 429852

for

Environmental Plus, Incorporated

Project Manager: David P. Duncan

EVGSAU 2801-002

150034

21-OCT-11

Collected By: Client

Celebrating 20 Years of commitment to excellence in Environmental Testing Services

12600 West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):
Texas (T104704215-10-6-TX), Arizona (AZ0765), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):
Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)
Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)
Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)
Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona(AZ0757)
Xenco-Phoenix Mobile (EPA Lab code: AZ00901): Arizona (AZM757)
Xenco Tucson (EPA Lab code:AZ000989): Arizona (AZ0758)

XENCO Laboratories

21-OCT-11

Project Manager: **David P. Duncan**
Environmental Plus, Incorporated
P.O. Box 1558
Eunice, NM 88231

Reference: XENCO Report No: **429852**
EVGSAU 2801-002
Project Address: UL-M, Sec. 28, T17S, R35E

David P. Duncan:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 429852. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 429852 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Sample Cross Reference 429852

Environmental Plus, Incorporated, Eunice, NM

EVGSAU 2801-002

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
NWSW (1')	S	10-14-11 10:10		429852-001
SWSW-C (1')	S	10-18-11 12:00		429852-002
SESW-C (1')	S	10-18-11 12:10		429852-003
NESW-A (1')	S	10-18-11 12:35		429852-004
NSW-A (1')	S	10-18-11 12:40		429852-005
NBH-A (2.5')	S	10-18-11 13:00		429852-006

CASE NARRATIVE

XENCO Laboratories

Client Name: Environmental Plus, Incorporated
Project Name: EVGSAU 2801-002

Project ID:	*150034*	*Report Date:*	*21-OCT-11*
Work Order Number:	*429852*	*Date Received:*	*10/19/2011*

Sample receipt non conformances and comments:
None

Sample receipt non conformances and comments per sample:

None

Analytical non nonformances and comments:

Batch: LBA-872845 TPH By SW8015 Mod
SW8015MOD_NM

Batch 872845, C6-C12 Gasoline Range Hydrocarbons recovered below QC limits in the Matrix Spike.
Samples affected are: 429852-003, -001, -002, -005, -004, -006.
The Laboratory Control Sample for C6-C12 Gasoline Range Hydrocarbons is within laboratory Control Limits

Batch: LBA-872871 BTEX by EPA 8021B
SW8021BM

Batch 872871, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Ethylbenzene, Toluene, m_p-Xylenes recovered below QC limits in the Matrix Spike Duplicate.
Samples affected are: 429852-002, -004, -006.
The Laboratory Control Sample for Toluene, o-Xylene, Ethylbenzene, m_p-Xylenes is within laboratory Control Limits

XENCO Laboratories

Certificate of Analysis Summary 429852

Environmental Plus, Incorporated, Eunice, NM

Project Name: EVGSAU 2801-002

Project Id: 150034
Contact: David P. Duncan
Project Location: UL-M, Sec. 28, T17S, R35E

Date Received in Lab: Wed Oct-19-11 03:48 pm
Report Date: 21-OCT-11
Project Manager: Brent Barron II

Analysis Requested													
	Lab Id:	429852-001		429852-002		429852-003		429852-004		429852-005		429852-006	
	Field Id:	NWSW (1')		SWSW-C (1')		SESW-C (1')		NESW-A (1')		NSW-A (1')		NBH-A (2.5')	
	Depth:												
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	Sampled:	Oct-14-11 10:10		Oct-18-11 12:00		Oct-18-11 12:10		Oct-18-11 12:35		Oct-18-11 12:40		Oct-18-11 13:00	
Anions by E300	*Extracted:*												
	Analyzed:	Oct-20-11 00:32		Oct-20-11 00:32		Oct-20-11 00:32		Oct-20-11 00:32		Oct-20-11 00:32		Oct-20-11 00:32	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Chloride		154	4.62	28.8	4.80	15.4	4.52	53.8	4.41	121	4.53	7.97	4.54
BTEX by EPA 8021B	*Extracted:*			Oct-20-11 15:00				Oct-20-11 15:00				Oct-20-11 15:00	
	Analyzed:			Oct-20-11 22:44				Oct-20-11 23:07				Oct-20-11 23:30	
	Units/RL:			mg/kg	RL			mg/kg	RL			mg/kg	RL
Benzene				ND	0.00114			ND	0.00104			ND	0.00107
Toluene				ND	0.00228			ND	0.00209			ND	0.00215
Ethylbenzene				ND	0.00114			ND	0.00104			ND	0.00107
m_p-Xylenes				ND	0.00228			ND	0.00209			ND	0.00215
o-Xylene				ND	0.00114			ND	0.00104			ND	0.00107
Total Xylenes				ND	0.00114			ND	0.00104			ND	0.00107
Total BTEX				ND	0.00114			ND	0.00104			ND	0.00107
Percent Moisture	*Extracted:*												
	Analyzed:	Oct-19-11 17:15		Oct-19-11 17:15		Oct-19-11 17:15		Oct-19-11 17:15		Oct-19-11 17:15		Oct-19-11 17:15	
	Units/RL:	%	RL	%	RL	%	RL	%	RL	%	RL	%	RL
Percent Moisture		9.18	1.00	12.5	1.00	7.18	1.00	4.68	1.00	7.19	1.00	7.57	1.00
TPH By SW8015 Mod	*Extracted:*	Oct-20-11 11:30		Oct-20-11 11:30		Oct-20-11 11:30		Oct-20-11 11:30		Oct-20-11 11:30		Oct-20-11 11:30	
	Analyzed:	Oct-20-11 12:42		Oct-20-11 13:07		Oct-20-11 13:32		Oct-20-11 13:58		Oct-20-11 14:23		Oct-20-11 14:48	
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
C6-C12 Gasoline Range Hydrocarbons		ND	16.5	ND	17.1	ND	16.1	ND	15.7	ND	16.1	ND	16.2
C12-C28 Diesel Range Hydrocarbons		ND	16.5	ND	17.1	ND	16.1	ND	15.7	ND	16.1	ND	16.2
C28-C35 Oil Range Hydrocarbons		ND	16.5	ND	17.1	ND	16.1	ND	15.7	ND	16.1	ND	16.2
Total TPH		ND	16.5	ND	17.1	ND	16.1	ND	15.7	ND	16.1	ND	16.2

Brent Barron II
Odessa Laboratory Manager

XENCO Laboratories

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantiation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

+ Outside XENCO's scope of NELAC Accreditation.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: EVGSAU 2801-002

Work Orders : 429852,

Project ID: 150034

Lab Batch #: 872845 **Sample:** 429852-001 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 12:42

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	83.4	99.9	83	70-135	
o-Terphenyl	54.7	50.0	109	70-135	

Lab Batch #: 872845 **Sample:** 429852-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 13:07

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	90.9	99.8	91	70-135	
o-Terphenyl	59.7	49.9	120	70-135	

Lab Batch #: 872845 **Sample:** 429852-003 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 13:32

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.0	99.7	84	70-135	
o-Terphenyl	53.7	49.9	108	70-135	

Lab Batch #: 872845 **Sample:** 429852-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 13:58

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	75.1	99.6	75	70-135	
o-Terphenyl	44.0	49.8	88	70-135	

Lab Batch #: 872845 **Sample:** 429852-005 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 14:23

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	89.4	99.9	89	70-135	
o-Terphenyl	54.7	50.0	109	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: EVGSAU 2801-002

Work Orders : 429852, **Project ID:** 150034

Lab Batch #: 872845 **Sample:** 429852-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 14:48

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	77.6	99.8	78	70-135	
o-Terphenyl	48.8	49.9	98	70-135	

Lab Batch #: 872871 **Sample:** 429852-002 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 22:44

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0267	0.0300	89	80-120	
4-Bromofluorobenzene	0.0252	0.0300	84	80-120	

Lab Batch #: 872871 **Sample:** 429852-004 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 23:07

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0260	0.0300	87	80-120	
4-Bromofluorobenzene	0.0270	0.0300	90	80-120	

Lab Batch #: 872871 **Sample:** 429852-006 / SMP **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 23:30

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0252	0.0300	84	80-120	
4-Bromofluorobenzene	0.0255	0.0300	85	80-120	

Lab Batch #: 872845 **Sample:** 612976-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/20/11 12:18

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	95.9	100	96	70-135	
o-Terphenyl	58.9	50.0	118	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: EVGSAU 2801-002

Work Orders : 429852, **Project ID:** 150034

Lab Batch #: 872871 **Sample:** 612998-1-BLK / BLK **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/20/11 22:21

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0261	0.0300	87	80-120	
4-Bromofluorobenzene	0.0262	0.0300	87	80-120	

Lab Batch #: 872845 **Sample:** 612976-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/20/11 10:06

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	105	100	105	70-135	
o-Terphenyl	56.6	50.0	113	70-135	

Lab Batch #: 872871 **Sample:** 612998-1-BKS / BKS **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/20/11 20:50

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0281	0.0300	94	80-120	
4-Bromofluorobenzene	0.0280	0.0300	93	80-120	

Lab Batch #: 872871 **Sample:** 612998-1-BSD / BSD **Batch:** 1 **Matrix:** Solid

Units: mg/kg **Date Analyzed:** 10/20/11 21:13

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0286	0.0300	95	80-120	
4-Bromofluorobenzene	0.0271	0.0300	90	80-120	

Lab Batch #: 872845 **Sample:** 429852-001 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 15:13

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	84.2	99.9	84	70-135	
o-Terphenyl	43.0	50.0	86	70-135	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Form 2 - Surrogate Recoveries

Project Name: EVGSAU 2801-002

Work Orders : 429852,

Project ID: 150034

Lab Batch #: 872871 **Sample:** 429852-002 S / MS **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/21/11 02:32

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0278	0.0300	93	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

Lab Batch #: 872845 **Sample:** 429852-001 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/20/11 15:38

TPH By SW8015 Mod Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1-Chlorooctane	93.2	99.8	93	70-135	
o-Terphenyl	49.9	49.9	100	70-135	

Lab Batch #: 872871 **Sample:** 429852-002 SD / MSD **Batch:** 1 **Matrix:** Soil

Units: mg/kg **Date Analyzed:** 10/21/11 02:55

BTEX by EPA 8021B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
1,4-Difluorobenzene	0.0275	0.0300	92	80-120	
4-Bromofluorobenzene	0.0281	0.0300	94	80-120	

* Surrogate outside of Laboratory QC limits

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

XENCO Laboratories

Blank Spike Recovery

Project Name: EVGSAU 2801-002

Work Order #: 429852 **Project ID:** 150034

Lab Batch #: 872845 **Sample:** 612976-1-BKS **Matrix:** Solid

Date Analyzed: 10/20/2011 **Date Prepared:** 10/20/2011 **Analyst:** ASA

Reporting Units: mg/kg **Batch #:** 1

		BLANK /BLANK SPIKE RECOVERY STUDY				
TPH By SW8015 Mod **Analytes**	**Blank Result [A]**	**Spike Added [B]**	**Blank Spike Result [C]**	**Blank Spike %R [D]**	**Control Limits %R**	**Flags**
C6-C12 Gasoline Range Hydrocarbons	<15.0	1000	818	82	70-135	
C12-C28 Diesel Range Hydrocarbons	<15.0	1000	1060	106	70-135	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Final 1.000

XENCO Laboratories

BS / BSD Recoveries

Project Name: EVGSAU 2801-002

Work Order #: 429852 **Project ID:** 150034

Analyst: ASA **Date Prepared:** 10/20/2011 **Date Analyzed:** 10/20/2011

Lab Batch ID: 872871 **Sample:** 612998-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

BTEX by EPA 8021B Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00100	0.100	0.111	111	0.125	0.128	102	14	70-130	35	
Toluene	<0.00200	0.100	0.114	114	0.125	0.129	103	12	70-130	35	
Ethylbenzene	<0.00100	0.100	0.118	118	0.125	0.135	108	13	71-129	35	
m_p-Xylenes	<0.00200	0.200	0.236	118	0.250	0.270	108	13	70-135	35	
o-Xylene	<0.00100	0.100	0.117	117	0.125	0.136	109	15	71-133	35	

Analyst: BRB **Date Prepared:** 10/20/2011 **Date Analyzed:** 10/20/2011

Lab Batch ID: 872710 **Sample:** 872710-1-BKS **Batch #:** 1 **Matrix:** Solid

Units: mg/kg

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Anions by E300 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Chloride	<0.840	20.0	22.0	110	20.0	22.0	110	0	75-125	20	

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|
Blank Spike Recovery [D] = 100*(C)/[B]
Blank Spike Duplicate Recovery [G] = 100*(F)/[E]
All results are based on MDL and Validated for QC Purposes

XENCO Laboratories

Form 3 - MS Recoveries

Project Name: EVGSAU 2801-002

Work Order #: 429852

Lab Batch #: 872710 **Project ID:** 150034

Date Analyzed: 10/20/2011 **Date Prepared:** 10/20/2011 **Analyst:** BRB

QC- Sample ID: 429606-006 S **Batch #:** 1 **Matrix:** Solid

Reporting Units: mg/kg

	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Inorganic Anions by EPA 300 **Analytes**	**Parent Sample Result [A]**	**Spike Added [B]**	**Spiked Sample Result [C]**	**%R [D]**	**Control Limits %R**	**Flag**
Chloride	499	200	723	112	75-125	

Lab Batch #: 872710

Date Analyzed: 10/20/2011 **Date Prepared:** 10/20/2011 **Analyst:** BRB

QC- Sample ID: 429736-001 S **Batch #:** 1 **Matrix:** Solid

Reporting Units: mg/kg

	MATRIX / MATRIX SPIKE RECOVERY STUDY					
Inorganic Anions by EPA 300 **Analytes**	**Parent Sample Result [A]**	**Spike Added [B]**	**Spiked Sample Result [C]**	**%R [D]**	**Control Limits %R**	**Flag**
Chloride	529	400	974	111	75-125	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference [E] = 200*(C-A)/(C+B)
All Results are based on MDL and Validated for QC Purposes

BRL - Below Reporting Limit

XENCO Laboratories

Form 3 - MS / MSD Recoveries

Project Name: EVGSAU 2801-002

Work Order # : 429852 **Project ID:** 150034

Lab Batch ID: 872871 **QC- Sample ID:** 429852-002 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/21/2011 **Date Prepared:** 10/20/2011 **Analyst:** ASA

Reporting Units: mg/kg

BTEX by EPA 8021B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	<0.00115	0.115	0.0843	73	0.114	0.0812	71	4	70-130	35	
Toluene	<0.00229	0.115	0.0826	72	0.114	0.0775	68	6	70-130	35	X
Ethylbenzene	<0.00115	0.115	0.0826	72	0.114	0.0760	67	8	71-129	35	X
m_p-Xylenes	<0.00229	0.229	0.160	70	0.228	0.146	64	9	70-135	35	X
o-Xylene	<0.00115	0.115	0.0762	66	0.114	0.0686	60	10	71-133	35	X

Lab Batch ID: 872845 **QC- Sample ID:** 429852-001 S **Batch #:** 1 **Matrix:** Soil

Date Analyzed: 10/20/2011 **Date Prepared:** 10/20/2011 **Analyst:** ASA

Reporting Units: mg/kg

TPH By SW8015 Mod Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
C6-C12 Gasoline Range Hydrocarbons	<16.5	1100	750	68	1100	839	76	11	70-135	35	X
C12-C28 Diesel Range Hydrocarbons	<16.5	1100	925	84	1100	993	90	7	70-135	35	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

XENCO Laboratories

Sample Duplicate Recovery

Project Name: EVGSAU 2801-002

Work Order #: 429852

Lab Batch #: 872710 **Project ID:** 150034

Date Analyzed: 10/20/2011 00:32 **Date Prepared:** 10/20/2011 **Analyst:** BRB

QC- Sample ID: 429736-001 D **Batch #:** 1 **Matrix:** Solid

Reporting Units: mg/kg

Anions by E300	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Chloride	529	513	3	20	

Lab Batch #: 872709

Date Analyzed: 10/19/2011 14:25 **Date Prepared:** 10/19/2011 **Analyst:** BRB

QC- Sample ID: 429746-001 D **Batch #:** 1 **Matrix:** Solid

Reporting Units: %

Percent Moisture	SAMPLE / SAMPLE DUPLICATE RECOVERY				
Analyte	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Percent Moisture	3.24	3.30	2	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.
BRL - Below Reporting Limit

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231 P.O. Box 1558, Eunice, NM 88231
(575) 394-3481 FAX: (575) 394-2601

Chain of Custody Form

LAB: Xenco

Company Name	Environmental Plus, Inc.
EPI Project Manager	David P. Duncan
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	ConocoPhillips Company
Facility Name	EVGSAU 2801-002
Location	UL-M, Sec. 28, T17S, R35E
Project Reference	150034
EPI Sampler Name	Danny Deaton

Remit Invoice To:

ConocoPhillips

ATTN: Mr. John Gates
HSER Lead
ConocoPhillips Company
29 Vacuum Complex Lane
Lovington, New Mexico 88260-9664

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH			
429857																									
1	NWSW (1')	G	1			X					X		14-Oct-11	10:10		X	X								
2	SWSW-C (1')	G	1			X					X		18-Oct-11	12:00	X	X	X								
3	SESW-C (1')	G	1			X					X		18-Oct-11	12:10		X	X								
4	NESW-A (1')	G	1			X					X		18-Oct-11	12:35	X	X	X								
5	NSW-A (1')	G	1			X					X		18-Oct-11	12:40		X	X								
6	NBH-A (2.5')	G	1			X					X		18-Oct-11	13:00	X	X	X								
7																									
8																									
9																									
10																									

ANALYSIS REQUEST

Sampler Relinquished: Danny Deaton	10/19/2011 Time 7:00	Received By:	E-mail results to: dduncanepi@gmail.com & John.W.Gates@conocophillips.com
Relinquished by:	10/19/2011 Time 15:48	Received By: (lab staff) Andrea Elam 10.19.11 15:48	24-HR. RUSH ORDER REQUESTED
Delivered by:	Sample Cool & Intact 2.0°C (Yes) No	Checked By:	w/labels no seals 4oz glass

XENCO Laboratories

XENCO Laboratories
Atlanta, Boca Raton, Corpus Christi, Dallas
Houston, Miami, Odessa, Philadelphia
Phoenix, San Antonio, Tampa

Document Title: Sample Receipt Checklist
Document No.: SYS-SRC
Revision/Date: No. 01, 5/27/2010
Effective Date: 6/1/2010 Page 1 of 1

Prelogin / Nonconformance Report - Sample Log-In

Client: E.P.I
Date/Time: 10.19.11 15:48
Lab ID #: 429852
Initials: CE

Sample Receipt Checklist

1. Samples on ice?	Blue	(Water)	No	
2. Shipping container in good condition?	(Yes)	No	None	
3. Custody seals intact on shipping container (cooler) and bottles?	Yes	No	(N/A)	
4. Chain of Custody present?	(Yes)	No		
5. Sample instructions complete on chain of custody?	(Yes)	No		
6. Any missing / extra samples?	Yes	(No)		
7. Chain of custody signed when relinquished / received?	(Yes)	No		
8. Chain of custody agrees with sample label(s)?	(Yes)	No		
9. Container labels legible and intact?	(Yes)	No		
10. Sample matrix / properties agree with chain of custody?	(Yes)	No		
11. Samples in proper container / bottle?	(Yes)	No		
12. Samples properly preserved?	(Yes)	No	N/A	
13. Sample container intact?	(Yes)	No		
14. Sufficient sample amount for indicated test(s)?	(Yes)	No		
15. All samples received within sufficient hold time?	(Yes)	No		
16. Subcontract of sample(s)?	Yes	No	(N/A)	
17. VOC sample have zero head space?	(Yes)	No	N/A	

18. Cooler 1 No.		Cooler 2 No.		Cooler 3 No.		Cooler 4 No.		Cooler 5 No.	
lbs	2.0 °C	lbs	°C	lbs	°C	lbs	°C	lbs	°C

Nonconformance Documentation

Contact:_____ Contacted by:_____ Date/Time:_____

Regarding: _____

Corrective Action Taken: _____

Check all that apply:
- ☐ Cooling process has begun shortly after sampling event and out of temperature condition acceptable by NELAC 5.5.8.3.1.a.1.
- ☐ Initial and Backup Temperature confirm out of temperature conditions
- ☐ Client understands and would like to proceed with analysis

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 21, 2011

David P. Duncan

Environmental Plus, Inc.

P.O. Box 1558

Eunice, NM 88231

RE: EVGSAU 2801-002

Enclosed are the results of analyses for samples received by the laboratory on 10/20/11 8:37.

Cardinal Laboratories is accredited through Texas NELAP for:

Method SW-846 8021	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method SW-846 8260	Benzene, Toluene, Ethyl Benzene, and Total Xylenes
Method TX 1005	Total Petroleum Hydorcarbons

Certificate number T104704398-08-TX. Accreditation applies to solid and chemical materials and non-potable water matrices.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Environmental Plus, Inc.
David P. Duncan
P.O. Box 1558
Eunice NM, 88231
Fax To: (505) 394-2601

Received:	10/20/2011	Sampling Date:	10/19/2011
Reported:	10/21/2011	Sampling Type:	Soil
Project Name:	EVGSAU 2801-002	Sampling Condition:	Cool & Intact
Project Number:	150034	Sample Received By:	Celey D. Keene
Project Location:	UL-M, SEC. 28, T17S, R35E		

Sample ID: SSW-D (1') (H102271-01)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	10/20/2011	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: AB**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/21/2011	ND	172	85.9	200	3.64	
DRO >C10-C28	<10.0	10.0	10/21/2011	ND	164	81.8	200	3.95	

Surrogate: 1-Chlorooctane	*93.0 %*	*55.5-154*
Surrogate: 1-Chlorooctadecane	*94.1 %*	*57.6-158*

Sample ID: MESW-E (1') (H102271-02)

Chloride, SM4500Cl-B mg/kg **Analyzed By: AP**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**128**	16.0	10/20/2011	ND	432	108	400	0.00	

TPH 8015M mg/kg **Analyzed By: AB**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	10/21/2011	ND	172	85.9	200	3.64	
DRO >C10-C28	<10.0	10.0	10/21/2011	ND	164	81.8	200	3.95	

Surrogate: 1-Chlorooctane	*91.3 %*	*55.5-154*
Surrogate: 1-Chlorooctadecane	*87.9 %*	*57.6-158*

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

Environmental Plus, Inc.

Chain of Custody Form

2100 Avenue O, Eunice, NM 88231 *P.O. Box 1558, Eunice, NM 88231*
(575) 394-3481 FAX: (575) 394-2601

LAB:

Company Name	Environmental Plus, Inc.
EPI Project Manager	David P. Duncan
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	575-394-3481 / 575-394-2601
Client Company	ConocoPhillips Company
Facility Name	EVGSAU 2801-002
Location	UL-M, Sec. 28, T17S, R35E
Project Reference	150034
EPI Sampler Name	Danny Deaton

Remit Invoice To:

ConocoPhillips

ATTN: Mr. John Gates
HSER Lead
ConocoPhillips Company
29 Vacuum Complex Lane
Lovington, New Mexico 88260-9664

ANALYSIS REQUEST

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl^-)	SULFATES ($SO_4^=$)	pH	TCLP	OTHER >>>	PAH			
H102271																									
1	SSW-D (1')	G	1			X					X		19-Oct-11	13:05		X	X								
2	MESW-E (1')	G	1			X					X		19-Oct-11	13:10		X	X								
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									

Sampler Relinquished: Danny Deaton	10/20/2011 Time 7:00	Received By: D.P. Duncan	E-mail results to: dduncanepi@gmail.com & John.W.Gates@conocophillips.com
Relinquished by: D.P. Duncan	10/20/2011 Time 2:37	Received By: (lab staff)	
Delivered by: 5°C	Sample Cool & Intact: Yes / No	Checked By:	

#26

ATTACHMENT III

Copy of Initial NMOCD Form C-141
Final NMOCD Form C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company **ConocoPhillips Company**	Contact **John W. Gates**
Address **3300 North A St. Bldg 6, Midland, TX 79705-5406**	Telephone No. **505.391.3158**
Facility Name **EVGSAU 2801-002**	Facility Type **Oil and Gas**

Surface Owner **State Of New Mexico**	Mineral Owner **State Of New Mexico**	Lease No **300252622500**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	**28**	**17S**	**35E**					**Lea**

Latitude **Longitude**

NATURE OF RELEASE

Type of Release **Crude Oil & Produced water**	Volume of Release **15.4bbl (15oil, .4water)**	Volume Recovered **(15oil, 0water)**
Source of Release **The release originated from a split behind a pipe collar on a 2 3/8 inch steel surface flow line due to suspected fatigue.**	Date and Hour of Occurrence **08/03/11 0700**	Date and Hour of Discovery **08/03/11 0730**
Was Immediate Notice Given? ☒ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The release originated from a split behind a pipe collar on a 2 3/8 inch steel surface flow line due to suspected fatigue.

Describe Area Affected and Cleanup Action Taken.*
60'x8'x1" area of pasture land. A vacuum truck was called and ~ 15 bbls of oil was recovered.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: John Gates	OIL CONSERVATION DIVISION	
Printed Name: **John W. Gates**	Approved by District Supervisor:	
Title: **HSER Lead**	Approval Date:	Expiration Date:
E-mail Address: **John.W.Gates@conocophillips.com**	Conditions of Approval:	Attached ☐
Date: **08/08/11** Phone: **505.391.3158**		

- Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: ConocoPhillips Company	**Contact:** John W. Gates
Address: 3300 North "A" St., Bldg. 6, Midland, Tx. 79705-5406	**Telephone No.:** (575) 391-3158
Facility Name: EVGSAU 2801-002	**Facility Type:** Production Flow Line

Surface Owner: State of New Mexico	**Mineral Owner:** State of New Mexico	**Lease No.** API # 30-025-2622500

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	South Line	Feet from the	West Line	County
M	28	17S	35E					Lea

Latitude: N32° 46' 49.99" **Longitude:** W103° 28' 11.64"

NATURE OF RELEASE

Type of Release: Crude Oil and Produced Water	**Volume of Release:** 15.4-bbl (15-oil, 0.4-water	**Volume Recovered:** 15-oil-0-water
Source of Release: Release originated from a split behind pipe collar on a 2 3/8" steel surface flow line due to suspected fatigue	**Date and Hour of Occurrence:** 8/03/11 @ 7:00 AM	**Date and Hour of Discovery:** 8/03/11 @ 7:30 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☒ Not Required	**If YES, To Whom?**	
By Whom?	**Date and Hour:**	
Was a Watercourse Reached? ☐ Yes ☒ No	**If YES, Volume Impacting the Watercourse:** N/A	

If a Watercourse was Impacted, Describe Fully. N/A

Depth to Groundwater: > 60- feet below ground surface (bgs)

Describe Cause of Problem and Remedial Action Taken.* Release originated from a split behind collar on a 2 3/8" steel surface flow line due to suspected fatigue; vacuum truck arrived at release area and recovered 15-bbls of fluid; COCP notified an environmental company (EPI) to assess damage, GPS survey, photograph the release area and prepare a Remediation Proposal

Describe Area Affected and Cleanup Action Taken.* After completing the above described activities, Environmental Plus, Inc., (EPI) submitted a Remediation Proposal to the NMOCD on 9-23-11; upon approval, EPI mobilized equipment to the job site on 10-10-11; from 10-12-11 thru 10-19-11 EPI excavated, loaded and transported ±532-cubic yards of impacted material to Controlled Recovery, Inc., (CRI) for disposal; soil samples were collected from the release area sidewalls and bottom on 10-13-11, 10-14-11 & 10-18-11, 10-19-11 and remitted to an independent laboratory for analyses of BTEX, TPH and chloride concentrations (C-o-C); upon receipt of laboratory analytical data indicating C-o-C concentrations were in compliance with NMOCD Goals, backfill operations commenced; on 10-24-11 ±532 cubic yards of clean top soil were imported and used to backfill the excavation; disturbed areas were contoured to prevent wind/water erosion and promote natural drainage; EPI recommends discing and deep drill seeding disturbed areas when weather/ground conditions are conducive to vegetative growth possible extending into late spring 2012.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: John W. Gates	OIL CONSERVATION DIVISION
Printed Name: John W. Gates	**Approved by Environmental Engineer:**
Title: HSER Lead	**Approval Date:** / **Expiration Date:**
E-mail Address: John.W.Gates@conocophillips.com	**Conditions of Approval:** / **Attached** ☐
Date: 11-08-11 **Phone:** (575) 391-3158	

*** Attach Additional Sheets If Necessary**